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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/982,559	12/02/1997	JOHN CAHILL	NSP-CASE-5	9469
75	90 12/04/2002			
FLYNN THIEL BOUTELL & TANIS			EXAMINER	
2026 RAMBLING ROAD KALAMAZOO, MI 49008			GUARRIELLO, JOHN J	
			ART UNIT	PAPER NUMBER
			1771	)(/
			DATE MAILED: 12/04/2002	$\alpha \gamma$

Please find below and/or attached an Office communication concerning this application or proceeding.

Group Art Unit  The correspondence address—  TH(S) FROM THE MAILING DATE  reply be timely filed after SIX (6) MONTHS  thirty (30) days will be considered timely.  alling date of this communication.  ABANDONED (35 U.S.C. § 133).  a fit timely, may reduce any earned patent  as to the merits is closed in
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Summary, PTO-413
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U.S. Patent and Trademark Office PTO-326 (Rev. 11/00)

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## **DETAILED ACTION**

- 15. The Examiner acknowledges paper # 23, the amendment of 9/11/2002.
- 16. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

## Claim Rejections - 35 USC § 102

17. Claims 23, 3-8, 10-12, 25 are rejected under 35 U.S.C. 102(E) as being anticipated by Kelch et al. 5,695,870.

Kelch describes a laminated foam insulation board with enhanced strength and resistance to bending and breaking, (see abstract). Kelch describes problems associated with foam boards, corresponding to fibreboard or foam of the claimed invention, which problems are high velocity winds, (column 1, lines 10-26). Kelch describes a foam panel and thermoplastic facer films (corresponding to the claimed biaxially oriented polymeric film), (column 2, lines 51-55). Kelch describes improved physical strength in both machine and transverse directions, (column 2, lines 59-65). Kelch describes the films can be biaxially oriented and can be polyethylene, polypropylene and

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others, (column 3, lines 4-38). Kelch describes the foam panels have a density of about 2.0 lbs./ cubic foot, (column 7, lines 10-13). Kelch describes the films can be cellulosic, (column 1, lines 35-36). Kelch describes the essential limitations of the claimed invention. Claims lack novelty.

18. Claims 23, 3-8, 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Minnick 5,098,778.

Rejection is maintained substantially as in paper # 15 of 2/14/2001, and in paper # 17 of 8/14/2001, and paper # 22 of 6/6/2002 with exceptions noted below with '451 in paragraph # 21 regarding claims 2, 15-22. Applicant's arguments regarding the wall structure have been considered but Minnick '778 describes building panels which can be considered wall structure as noted, (column 2, lines 54-58). Furthermore, Minnick '778 still describes light weight, high strength laminates (column 7, lines 54-60) with a low density, 0.7 lb./cu.ft. (Column 8, lines 62-63). Minnick '778 describes the laminate has high strength of at least 9.9 Mpsi, flex strength, and specific strength values of 0.8(L) and 2.5(C) in (Table II, Example I), (column 9, lines

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34-60). Since, Minnick '778 teaches each of the chemical and structural elements claimed, then it must meet the mechanical strength inherently.

Minnick '778 meets the essential limitations of the claimed invention. Claims lack novelty.

## Claim Rejections - 35 USC § 103

- 19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 20. Claims 23, 2, 9, 15-22, 24, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelch in view of Minnick 5,451,451.

Kelch as above in paragraph # 19 with the difference that it is silent about the cellulosic layer laminated to the reinforcing layer.

Minnick '451 describes lightweight high strength laminate, (see abstract; column 2, lines 47-68; column 4, lines 5-36). Minnick '451 describes the cellulosic layer "in another aspect of the invention" (column 7,

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lines 59-60) which corresponds to the cellulosic layer which is laminated to the reinforcing layer. Minnick '451 describes resin is impregnated into cotton linter paper (which is cellulose), (column 7, lines 59-64).

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It would have been obvious to one or ordinary skill in the art at the time the invention was made to employ the cellulosic layer of Minnick '451 in the panel board of Kelch motivated with the expectation that the resin impregnated layer (as the third layer for the foam board) would improve the properties of strength of the foam insulation board so as to withstand the problem of high velocity winds as noted in Kelch, (column 1, lines 23-25). Regarding claim 9, the polymeric fabric can be woven since one of ordinary skill would appropriately select woven fabric to increase the strength of the panel board or fiberboard.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Guarriello whose telephone number is 703-308-3209. The examiner can normally be reached on Monday to Friday from 8 am to 4 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris, can be reached on (703) 308-2414. The fax phone number for the organization where this application or proceeding is assigned is 703-305-5408.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

John J. Guarriello:gj

Patent Examiner

November 22, 2002

December 2, 2002